UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

SCANSOFT, INC.,	)
	)
	)
Plaintiff,	)
	)
v.	) C.A. No. 04-10353-PBS
	)
	)
VOICE SIGNAL TECHNOLOGIES, INC.,	)
LAURENCE S. GILLICK, ROBERT S.	)
ROTH, JONATHAN P. YAMRON, and	)
MANFRED G. GRABHERR,	)
	)
Defendants.	)
	)

SUPPLEMENTAL DECLARATION OF MANFRED G. GRABHERR
IN SUPPORT OF HIS MOTION FOR SUMMARY JUDGMENT

I, Manfred G. Grabherr, on oath, depose and say as follows:

1.   I am currently employed by the Broad Institute of Massachusetts Institute of

Technology as a computational biologist. I was formerly employed by Voice Signal

Technologies, Inc. ("Voice Signal"), and I am a defendant in the above captioned lawsuit. I

make this supplemental declaration in connection with my motion for summary judgment.

2.   I have reviewed ScanSoft's Opposition to my Motion for Summary Judgment and

the accompanying Declaration of William F. Ganong.   In his Declaration, Mr. Ganong states

that "algorithms for recognizing commands" from the Voice Xpress product developed by L&H

are now incorporated in ScanSoft's Dragon Naturally Speaking product. If this is true it

happened after my departure from L&H, and I do not have knowledge about the Dragon

Naturally Speaking product. I implemented the algorithms Mr. Ganong mentions for

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recognizing commands in the midst of dictation in the Voice Xpress and they are in the public

domain. The specific idea Ganong discusses allows a user to speak a command, such as "correct

third word," in the midst of the dictation and Voice Xpress would recognize it as a command, not

as more dictation. The Voice Signal dictation system does not have this feature, ScanSoft can

plainly determine this by simply using the product which is publicly available. Therefore, it is

not even conceivable that I might have used this ScanSoft's algorithm as asserted by ScanSoft.

Furthermore the suggestion that the "architectures" of the systems I worked on while at L&H are

not known in the public is absurd. L&H system architectures were totally standard, and

numerous papers and systems with publicly available source code have the same "architecture."

His other comments are so generic in nature that no speech scientist could have any idea what he

is talking about. It is not possible to tell which other ideas he believes are trade secrets from his

descriptions. Anyone knowledgeable in the speech field would know that the generic concepts

he discusses are broad categories, not actual ideas or methods.
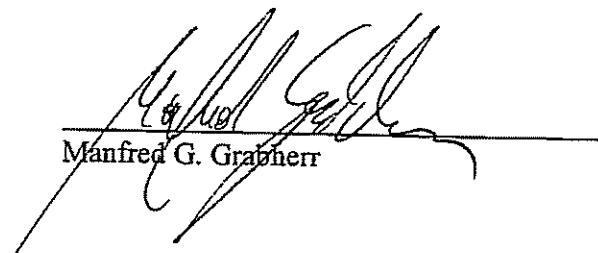
     3.   ScanSoft's Opposition suggests that the work I did on the Voice Xpress product

and the Phoenix project somehow relate to work I did at Voice Signal. This is simply not true.

L&H's Voice Xpress product was continuous speech PC dictation product designed to run on a

full size, desktop computer. It required a 166 MHz Pentium processor, 130 megabytes of hard

disk memory (ROM) and 48 megabytes of RAM. It required a Windows 98 Operating System.

Its purpose was to take dictation from continuously spoken speech on a PC and it could

simultaneously respond to commands for editing operations. My work at Voice Signal was

directed to development of voice dialing and discrete dictation for implementation on a cell

phone. All I know about Dragon Naturally Speaking which was developed at Dragon is what is

published – it requires a 500 MHz Pentium III processor and needed 500 megabytes of ROM and

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256 megabytes of RAM. It requires a Windows XP operating system. Windows XP can not be run on a cell phone, not to mention a dictation product like Naturally Speaking.

4.   By contrast, Voice Signal's products were developed to run in the processing power and memory environment of a mobile phone. They provide voice dialing functions and discrete dictation on a mobile phone. Instead of a Pentium-class processor, it runs on a 37MHz, battery-operated processor used in cell phones. When configured to take dictation of discretely spoken words it requires only 1.5 megabytes of ROM and only 1 megabyte of RAM. To my knowledge, Voice Signal does not even have a commercially available continuous dictation system. It does not require an operating system at all, let alone Windows or Linux. The Voice Signal dictation system cannot simultaneously respond to commands.

5.   The Phoenix project at L&H was an attempt to remove components of Voice Xpress such that it could be demonstrated on a hand-held computer. The project was a failure. In fact, while I was at L&H we were never able to get it to run on a hand held computer of any kind. We had to make public demonstrations by having a desktop computer (hidden off stage) run the system and then use a connection to display the recognition results on a hand-held. During the time I worked for L&H on the Phoenix project, L&H failed to enable a large vocabulary system on even a powerful hand-held computer, much less a cell phone or PDA. The smallest Phoenix recognizer still required more than fifteen times the processing power and memory of Voice Signal's dictation product and needed a LINUX operating system and a 275 MHz processor.

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Signed under the pains and penalties of perjury this 28th day of June, 2005.

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Manfred G. Grabherr

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